

WE CLAIM:

1. A method of embedding digital information in a printed object, the method comprising:

receiving a digital image representing the printed object, the printed object
5 corresponding to a person;

embedding plural bit digital information in the digital image, where the embedding modifies the digital image such that the plural bit digital information is carried in the printed object on which the digital image is printed and is machine readable from an optical scan of the printed object; and

10 creating a data store for storing contact information for the person, the data store being accessible using the plural bit digital information extracted from the optical scan of the printed object, and being operable to update a contact database in response to the optical scan of the printed object.

15 2. The method of claim 1 in which the printed object is a business card and the plural-bit digital information is steganographically encoded on the business card.

3. A printed object that has been created using the method of claim 1.

20 4. A method of embedding digital information in a printed object comprising:

forming plural-bit digital data for embedding in a printed object, the plural-bit digital data being machine readable from an optical scan of the printed object, a first part of said plural-bit digital data being operable to establish a link between a first device where the optical scan is made and a remote computer, a second part of said plural-bit digital data being
25 usable by the remote computer to obtain information corresponding to the object; and

embedding the plural-digital data in an image to be printed on the printed object.

5. The method of claim 4 wherein the first part of said plural-bit digital data is used to traverse a network of plural server computers to thereby identify the remote computer.

6. The method of claim 4 in which the object is a business card relating to a person,
and the information provided from the remote computer includes contact information relating to said person.

7. The method of claim 4 wherein the embedding is performed in a printer by making variations in ink on the printed object that convey the plural bit digital data.

8. The method of claim 4 wherein the embedding is performed in a printer driver that makes variations to image pixels to be printed on the object such that the variations convey the plural bit digital data.

9. A printed object that has been created using the method of claim 4.

10. A method of embedding digital information in a printed object, the method comprising:

embedding digital information in an image to be printed on the printed object; and
storing an association between the digital information and an access permission, the digital information being machine readable from an optical scan of the printed object and operable to retrieve the access permission to control access.

11. The method of claim 10 wherein the printed object comprises a photo identification document in which the digital information is embedded.

12. The method of claim 10 wherein the access permission specifies an authorized time of access, and the printed object is used to obtain access during the authorized time of access in response to an optical scan of the printed object.

13. The method of claim 10 wherein the printed object comprises a photo identification document and the digital information is used to obtain access to a photo identification document renewal system.

5 14. The method of claim 10 wherein the printed object comprises a ticket and the digital information is used to obtain access to an event.

15. The method of claim 10 wherein the ticket is obtained electronically by a user and printed by the user to create a physical object to gain access to the event.

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16. The method of claim 10 wherein the access permission is updated in response to use of the printed object to obtain access so that further access is controlled.

15 17. The method of claim 16 wherein the printed object is a ticket obtained electronically by a user and printed by the user to create a physical object to obtain access to the event.

20 18. The method of claim 10 wherein the digital information is machine detected using a process of optical scanning, the optical scanning process including illuminating the printed object by a pulsed illumination source.

25 19. The method of claim 10 wherein the printed object comprises a photo identification document and the digital information is used to access a personal record of a person associated with the document.

20. The method of claim 19 wherein the printed object comprises a bank card.